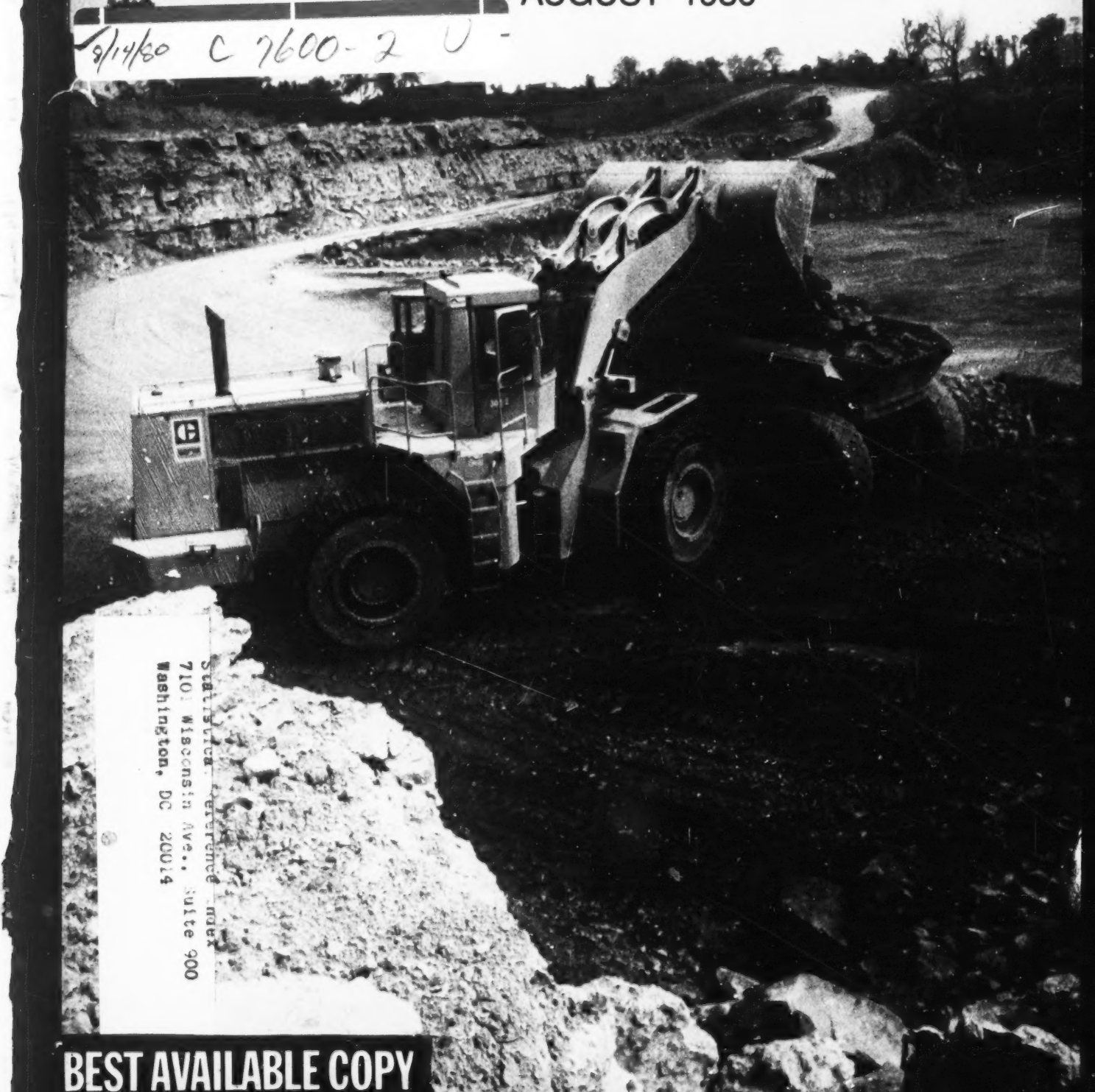
PIT & QUARRY

AUGUST 1980

9/14/80 C 7600-2 U -

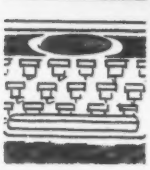


Stanley Aarons, Manager
710 Wisconsin Ave., Suite 900
Washington, DC 20014

BEST AVAILABLE COPY

PIT & QUARRY

page 17



page 87

page 62

page 64

EDITORIAL

55 **Waiting for "Eureka!" ..... Patricia Murphy**

PLANTS

56 **Colorado limestone processor adds calcining operation ..... Sandy Herod**
Markets now range from mine rock dust to wastewater treatment

72 **Asphalt producer improves output with captive quarry ..... Charles Steele**

DRILLING & BLASTING

62 **Good communications: essential to blast security ..... Matthew M. Champion**

91 **Canyon converted into Denver reservoir**

OPERATING & TECHNICAL

78 **From weighted needles to the x-ray spectrometer ..... David P. Elliott**
Industry pioneer celebrates 150 years of progress

93 **Maryland producers join forces and increase profit**

SAFETY

85 **Test your safety sense ..... Frank Kelley**
Take the time to test your basic safety knowledge

99 **Industry safety directors tour MSHA Denver center ..... John C. Schmitt**

Published by
PIT AND QUARRY PUBLICATIONS, INC.

AN EMPLOYEE-OWNED ORGANIZATION.

CONTENTS/AUGUST 1980 VOL. 73 NO. 2

GENERAL

64 A look at our fuel choices ..... Peter Gottlieb

96 Womanhours: never underestimate the power . . .
Riverside secretary sparks seminar
about women in construction

MANAGEMENT

87 Writing business letters ..... Patricia Murphy

109 Criteria for evaluating shares
in a closely held corporation or:
What are those pieces of paper worth?

DEPARTMENTS

7 The National Scene
11 Industry Personals
17 Industry News
19 Coming Events
35 Screenings
37 Truck Topics
105 Useful Literature
113 Readers' Service Card
115 Manufacturers' News
121 New Equipment
126 Classified Ads
136 Advertising Sales Offices
137 Advertisers' Index

AND NEXT MONTH

Georgia mine reclamation recognized by proclamation.

ON THIS MONTH'S COVER

Captive quarry opened recently by Missouri producer to supply limestone aggregate for bituminous concrete production. See page 72.

Executive and Editorial Offices: 105 W. Adams St., Chicago, Illinois 60603. Phone (312) 726-7151.

PIT & QUARRY is published monthly. Copyright 1980 by Pit & Quarry Publications, Inc. Controlled circulation postage paid at Chicago, Illinois 60607 and pending at Senatobia, Mississippi 38668. In changing address, please give old as well as new address.

Subscription prices: U.S., U.S. Poss. and Canada, 1 Year $18.00. All other countries, 1 Year $50.00. Single copies: $2.00 each to U.S., U.S. Poss. and Canada. All other countries, $4.00 each. (payable in U.S. funds only)

Member of:
American Business Press, Inc.
Business Publications Audit of Circulation, Inc.
Associated Equipment Distributors

Pit & Quarry is indexed by Engineering Index, Inc.
Copies of back issues are available on microfilm from Xerox University Microfilms, 300 N. Zeeb Road, Ann Arbor, Michigan 48106.

INTERNATIONAL STANDARD SERIAL NUMBER: ISSN 0032-0293 (registered in National Serials Data Program, Library of Congress, Washington, D.C. 20540)

Postmaster: Please send form 3579 to Pit & Quarry Publications, Inc., 105 W. Adams St., Chicago, Illinois 60603

MEMBER

VBPA ABP

BEST AVAILABLE COPY

COMPARISON OF MONTHLY/YEAR-AGO CONSTRUCTION CONTRACT VALUES*

	1980 May	1979 May	% Change
Nonresidential Building	$ 4,135.4	$ 4,440.8	– 7
Residential Building	4,494.6	8,084.3	–44
Nonbuilding Construction	2,505.0	3,723.4	–33
Total Construction	$11,135.0	$16,248.5	–31

	1980 5 mos.	1979 5 mos.	% Change
Nonresidential Building	$20,079.4	$20,112.9	—
Residential Building	21,783.0	31,349.3	–31
Nonbuilding Construction	12,489.4	22,197.4	–44
Total Construction	$54,351.8	$73,659.6	–26

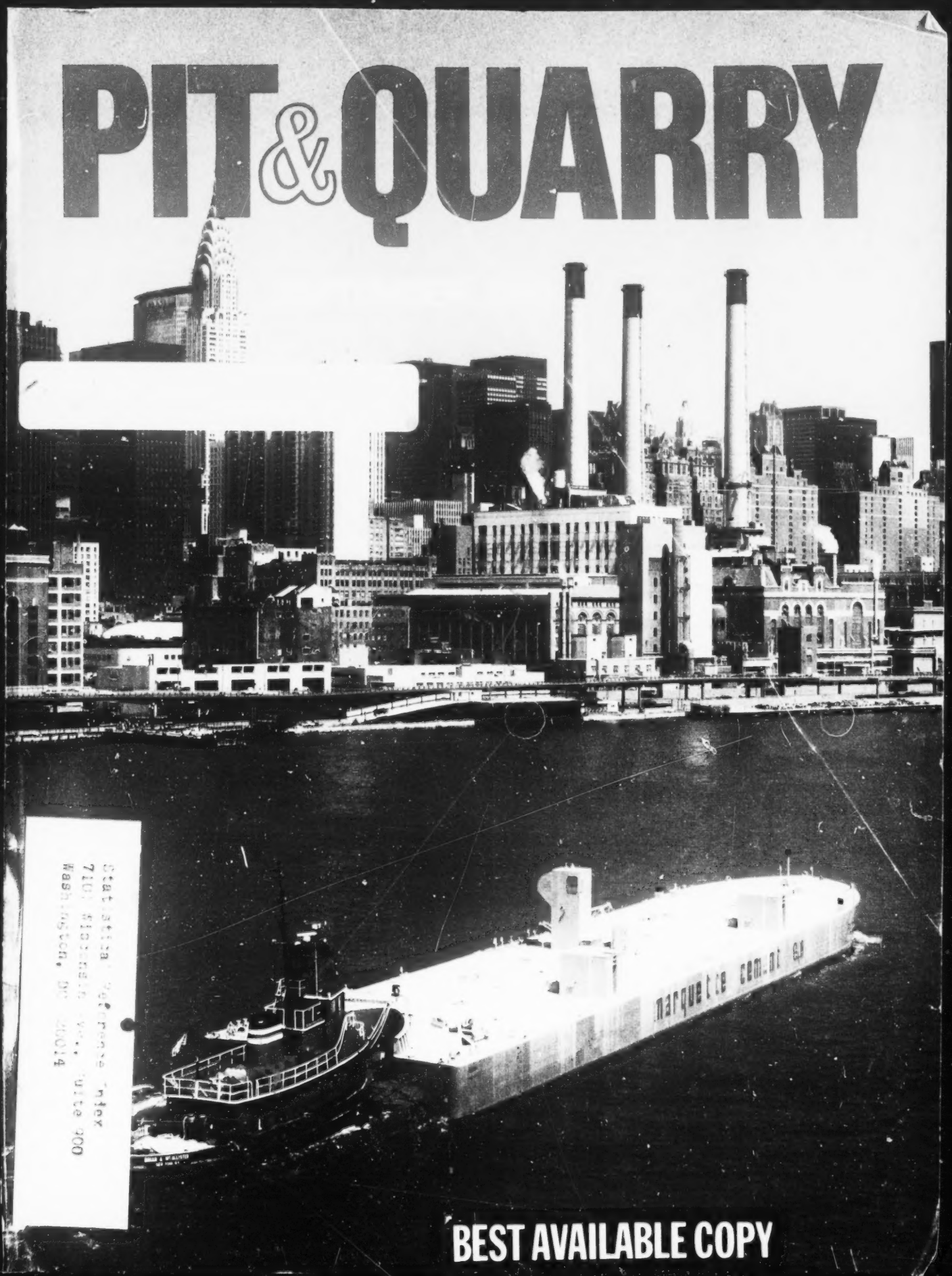
DODGE INDEX

(1972 = 100, seasonally adjusted)

March, 1980 ..... 155 April, 1980..... 130 May, 1980 125

**Based on statistics compiled by the F.W. Dodge Div., McGraw-Hill Information Systems Co.*

PIT & QUARRY



BEST AVAILABLE COPY

PIT&QUARRY

page 52

page 76

page 51

page 61

EDITORIAL

51 ¢*§(£‡Ø¿&«! ..... Patricia Murphy

PLANTS

56 Vulcan processes granite gneiss for road markets ..... Sid Levine
Georgia plant uses closed reclaim system for process water

76 Portable crushers meet million ton aggregate demand ..... Charles Steele

RECLAMATION

52 Georgia: a leader in mineral resources and reclamation ..... Patricia Murphy

OPERATING & TECHNICAL

70 Excavator solves overburden, waste removal problem at high-grade clay deposit

87 Oscillating conveyors display application benefits ..... Edward J. Berk

SAFETY

65 Recognize 1,485,067 safe man-hours

91 CQMA to feature industry concerns at October meeting

GENERAL

60 geologist,n.: resource for quarry owners ..... Stephen D. Schwochow
Recent conference highlights geology's role in minimizing problems

81 Marquette cement barge makes maiden voyage

Published by
PIT AND QUARRY PUBLICATIONS, INC.

AN EMPLOYEE-OWNED ORGANIZATION.

CONTENTS/SEPTEMBER 1980 VOL. 73 NO. 3

MANAGEMENT

84 **Industry's ticket to the political arena** ..... **Patricia Murphy**
Political action committees

ASSOCIATIONS

66 **NLI directors told of growing markets, pending regulation at mid-year meeting** ..... **Charles Steele**

73 **NCSA board meeting centers on future goals**
Long range plans relate to marketing, operations, governmental affairs

DEPARTMENTS

7 The National Scene
17 Industry News
25 Coming Events
29 Screenings
31 Truck Topics
93 Useful Literature
97 New Equipment
101 Manufacturers' News
105 Readers' Service Card
107 Classified Ads
117 Advertising Sales Offices
118 Advertiser's Index

AND NEXT MONTH

Our annual special maintenance issue will feature reports ranging from crusher upkeep to care of vehicle power trains.

ON THIS MONTH'S COVER

Marquette's new ocean-going barge rounds the southern tip of Manhattan on its maiden voyage to the firm's Flushing Bay terminal, Long Island. See page 81. Photo courtesy of Gulf+Western Industries.

Executive and Editorial Offices: 105 W. Adams St., Chicago, Illinois 60603. Phone (312) 726-7151.

PIT & QUARRY is published monthly. Copyright 1980 by Pit & Quarry Publications, Inc. Controlled circulation postage paid at Chicago, Illinois 60607 and pending at Senatobia, Mississippi 38668. In changing address, please give old as well as new address.

Subscription prices: U.S., U.S. Poss. and Canada, 1 Year $18.00. All other countries, 1 Year $50.00. Single copies: $2.00 each to U.S., U.S. Poss. and Canada. All other countries, $4.00 each. (payable in U.S. funds only)

Member of:
American Business Press, Inc.
Business Publications Audit of Circulation, Inc.
Associated Equipment Distributors

Pit & Quarry is indexed by Engineering Index, Inc.
Copies of back issues are available on microfilm from Xerox University Microfilms, 300 N. Zeeb Road, Ann Arbor, Michigan 48106.

INTERNATIONAL STANDARD SERIAL NUMBER: ISSN 0032-0293 (registered in National Serials Data Program, Library of Congress, Washington, D.C. 20540)

Postmaster: Please send form 3579 to Pit & Quarry Publications, Inc., 105 W. Adams St., Chicago, Illinois 60603

MEMBER

BPA ABP

BEST AVAILABLE COPY

COMPARISON OF MONTHLY/YEAR-AGO CONSTRUCTION CONTRACT VALUES*

	1980 June	1979 June	% Change
Nonresidential Building	$ 4,861.2	$ 4,603.6	+ 6
Residential Building	5,092.1	7,309.3	−30
Nonbuilding Construction	2,471.4	3,241.4	−24
Total Construction	$12,424.7	$15,154.3	−18

	1980 6 mos.	1979 6 mos.	% Change
Nonresidential Building	$24,775.7	$24,727.0	—
Residential Building	26,726.9	38,648.8	−31
Nonbuilding Construction	14,957.2	25,436.5	−41
Total Construction	$66,459.8	$88,812.3	−25

DODGE INDEX

(1972 = 100, seasonally adjusted)

April, 1980 ..... 130 May, 1980 ..... 125 June, 1980 145

**Based on statistics compiled by the F.W. Dodge Div., McGraw-Hill Information Systems Co.*

PIT & QUARRY

OCTOBER 1980 maintenance issue

10/31/80 C 7600-2 U

Statistical Reference Index
7101 Wisconsin Ave., Suite 900
Washington, DC 20014

Published by
PIT AND QUARRY PUBLICATIONS, INC.

AN EMPLOYEE-OWNED ORGANIZATION.

CONTENTS/OCTOBER 1980 VOL. 73 NO. 4

SAFETY

102 **Act before the fact** ..... David C. Meyers
Safety awareness lowers workers' comp. costs

ASSOCIATIONS

120 **NCSA operations division holds 17th annual session** ..... Sandy Herod
Productivity, energy conservation, efficiency are meeting themes

GENERAL

100 **Equipment maker celebrates 100th birthday**

123 **Return of the E. M. Ford**

DEPARTMENTS

7 The National Scene
11 Industry Personals
17 Industry News
24 Coming Events
39 Screenings
41 Truck Topics
113 Useful Literature
127 New Equipment
139 Manufacturers' News
148 Classified Ads
159 Advertising Sales Offices
160 Advertisers' Index
161 Readers' Service Card

AND NEXT MONTH

Considerations on en masse conveyor systems
Western lime plant doubles capacity to serve steel market

ON THIS MONTH'S COVER

Distribution, among a bearing's rolling elements, of an applied load is diagrammed against a backdrop of several types of the bearings that keep industry moving. For a discussion of bearing failures and the causes, see pg. 71. (Photos courtesy of SKF Industries, Inc.)

Executive and Editorial Offices: 105 W. Adams St., Chicago, Illinois 60603. Phone (312) 726-7151.

PIT & QUARRY is published monthly. Copyright 1980 by Pit & Quarry Publications, Inc. Controlled circulation postage paid at Chicago, Illinois 60607 and at Senatobia, Mississippi 38668. In changing address, please give old as well as new address.

Subscription prices: U.S., U.S. Poss. and Canada, 1 Year $18.00. All other countries, 1 Year $50.00. Single copies: $2.00 each to U.S., U.S. Poss. and Canada. All other countries, $4.00 each. (payable in U.S. funds only)

Member of:
American Business Press, Inc.
Business Publications Audit of Circulation, Inc.
Associated Equipment Distributors

Pit & Quarry is indexed by Engineering Index, Inc.
Copies of back issues are available on microfilm from Xerox University Microfilms, 300 N. Zeeb Road, Ann Arbor, Michigan 48106.

INTERNATIONAL STANDARD SERIAL NUMBER: ISSN 0032-0293 (registered in National Serials Data Program, Library of Congress, Washington, D.C. 20540)

Postmaster: Please send form 3579 to Pit & Quarry Publications, Inc., 105 W. Adams St., Chicago, Illinois 60603

MEMBER

BPA ABP

BEST AVAILABLE COPY

ferences, contact any of the following: Delia Associates, P.O. Box 338, Whitehouse, New Jersey 08888 (201-534-9044); German American Chamber of Commerce, 666 Fifth Ave., New York, NY. 10019; Contracts International Co., 5465 Queen Mary Road, Ste. 480, Montreal, P.Q. H3X 1V5.

Papers for Latin America Building/Construction Expo

Abstracts are being accepted for the technical seminar program to be held concurrently with the premiere presentation of the Latin America Building and Construction Exposition October 27-30, 1981, in Panama, Republic of Panama.

Tailored to the needs of the region, state-of-the-art presentations will be combined with thought-provoking workshops to provide a forum for open exchange of technology, concepts and product information. The final selection of topics by the Panama Contractors Association will reflect worldwide industry trends with particular application to the Latin American market.

To submit an abstract, speakers should provide the title and describe the contents of the proposed paper in 100-200 words. The deadline for abstracts is May 15, 1981, but should be mailed as soon as possible. Announcement of selected papers will be made about June 1, 1981.

Specify in which language the paper will be presented, approximate length of time needed, and describe the use of any audio-visual materials which might be needed. Also include a very brief resume, specifically mentioning association or society affiliations.

For additional information contact Harry Lepinske, director, Latin American Operations, Industrial and Scientific Conference Management, a Cahners Exposition Group Company, 222 W. Adams St., Chicago, Ill. 60606.

COMPARISON OF MONTHLY/YEAR-AGO CONSTRUCTION CONTRACT VALUES*

	1980 July	1979 July	% Change
Nonresidential Building	$ 4,818.7	$ 4,567.4	+ 6
Residential Building	6,105.4	6,882.1	- 11
Nonbuilding Construction	2,542.4	4,325.8	- 41
Total Construction	$13,466.5	$15,775.3	- 15

	1980 7 mos.	1979 7 mos.	% Change
Nonresidential Building	$29,504.4	$ 29,297.7	+ 1
Residential Building	32,765.7	45,505.7	- 28
Nonbuilding Construction	17,488.3	29,760.4	- 41
Total Construction	$79,758.4	$104,563.8	- 24

DODGE INDEX
(1972 = 100, seasonally adjusted)

May, 1980 ..... 125 June, 1980 ..... 145 July, 1980 148

**Based on statistics compiled by F.W. Dodge Div., McGraw-Hill Information Systems Co.*

Florida Phosphate Operation Wins Sentinels of Safety Award

USS Agri-Chemicals' Rockland, Fla., phosphate mine has won the 1979 Sentinels of Safety Award cosponsored by the Mine Safety and Health Administration and the American Mining Congress. The award is presented for accumulating the most workhours at a single open pit mine without an employee missing a workday due to injury. The Rockland mine recorded no lost workday injuries during a total worktime of more than 500,000 hours in 1979.

Editorial Guidelines

Deadlines — departments and coming events: six weeks before publication date.

Feature articles: The editors welcome article ideas and manuscripts on topics of interest to our readers. Ideas should be presented in a query letter. Reply made, as to acceptance or rejection, within six to eight weeks.

Specify HOLZ
REPLACEABLE LAGGING
FOR BEST CONVEYOR AND
ELEVATOR PERFORMANCE
IMPROVED TRACTION
Whether it's mining tar sand, copper, iron or just plain sand and gravel, SLIDE-LAG replaceable pulley lagging is on the job — doing its job! Unequaled for drive-pulley traction, SLIDE-LAG also provides protection for belt and pulleys as well as superb self-cleaning action during operation. And when it's time, replacement is quick and easy — all with the pulleys still in place.
LONGER SYSTEM LIFE
BELT-SAVER protection pads for non-drive pulleys are installed and replaced in the same manner. These pads are specifically designed to prevent material accumulation on all support pulleys. At the same time they also provide protection for the belt and the pulleys — to extend the life of these costly equipment components.
SLIDE-LAG
BELT-SAVER
For your free catalog, nearest dealer, and price information, contact . . .
HOLZ
RUBBER CO., INC.
A RANDTRON SUBSIDIARY
1129 So. Sacramento Street
P.O. Box 109 Lodi, CA 95240
Phone 209/368-7171 • Telex 35-9453
Outside California CALL TOLL FREE 800-344-3202
Circle 23 on card, page 161

BEST AVAILABLE COPY